

SHORTER NOTE

Ferns at Fort Adams State Park, Rhode Island.—The occurrence of ferns at Fort Adams in Newport, Newport County, Rhode Island, parallels remarkably their occurrence at Fort Totten, Queens County, New York, as reported by Greller and Locke (Amer. Fern J. 73:6-8, 1983). Greller and Locke found *Asplenium platyneuron* (L.) Britton Sterns, & Poggenb. and *Woodsia obtusa* (Spreng.) Torr. flourishing in decomposing mortar that holds in place the blocks of granite of the fort walls. At Newport, the *Woodsia* likewise thrives in mortar of the exterior walls (Fig. 1), but not the *Asplenium*, although *Cystopteris tenuis* (Michx.) Desv. in lesser numbers occupies more sheltered spots within the fort near open portals.

The similarities increase when one realizes that the same Joseph G. Totten, who is celebrated at the Queen's County fort, engineered in 1824 the remodeling of the already outmoded Fort Adams while he was a lieutenant colonel. As the Queens County ferns have adapted to salt spray, so at Newport, where the walls are less than 100 ft from Narragansett Bay (Fig. 2). They take the spray from the prevailing northwest winter winds and nor'easters assault them frequently. Yet, hundreds of *Woodsia* plants not only survive, but grow and bear copious spores. In addition to the ferns, the yellow wall lichen (*Xanthoparmelia conspersa* (Ehrh. ex Ach.) Hale) abounds, as well as various flowering plants, from the tiny pearlwort (*Sagina procumbens* L.) to the seaside goldenrod (*Solidago sempervirens* L.).

The Fort Adams grounds, whose nearly 57 hectares (140 acres) are now a state park, rest on calcium-bearing slate. The *Asplenium platyneuron*, although not on the fort structure proper, occurs along the shore, where relentless wave action has exposed slate outcrops. It also appears on a low retaining wall, a part of the landscaping. Where blasting of rock occurred in times past, *Dryopteris marginalis* (L.) A. Gray grows along with *Selaginella rupestris* (L.) Spring, *Saxifraga virginiana* Michx., and *Aquilegia canadensis* L. Perhaps most surprisingly of all, because of its acknowledged rarity in Rhode Island, is a colony of *Asplenium trichomanes* L. on a ledge obviously blasted to make way for a road.

At an abandoned granite quarry less than 1.5 km from Fort Adams, the writer found a stand of long beech fern, *Phegopteris connectilis* (Michx.) Watt. This grows less than 1 km from the ocean and probably not elsewhere within a 25 km radius. As recorded by this writer (Rhodora 96:102, 103, 1994), the marsh fern (*Thelypteris palustris* Schott) occupies a wall cranny along a busy street, a far cry from its usual habitat. Again, *Cystopteris tenuis* occurs on a sea cliff near Fort Adams, about 2.5 m above high tide. One can almost touch the fern and salt water at the same time. Thus, Newport, the City by the Sea, with its numerous mansions a century old or more, plays host to many fern colonies, but none more conspicuous than the *Woodsia obtusa* at Fort Adams.—RICHARD L. CHAMPLIN, 15 Priscilla Rd., Jamestown, RI 02835.



FIG. 1. *Woodsia obtusa* growing in the mortar of an exterior wall at Fort Adams State Park.



FIG. 2. Exterior view of a portion of Fort Adams, showing the proximity of the exterior walls to the water of Narragansett Bay.